Determination of Public Land (Rangeland) Health for

64009 – EAST CHINA DRAW

The Record of Decision (ROD) for the New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (dated January 2001) adopted three Standards for Public Land Health. These are (1) Upland Sites Standard, (2) Biotic Communities, including native, Threatened, Endangered, and Special Status Species Standard and (3) Riparian Sites Standard.

The ROD also established a process for the BLM field Offices for implementation. Through a public participation process, the Roswell Field Office developed and adopted indicators to use in conjunction with existing monitoring data to assess these standards.

Field assessment worksheets and other available data that evaluate the local indicators were completed for this allotment. Based on these assessments, it is my determination that public land within the East China Draw allotment, 64009, meets the (1) Upland Sites standard and (2) Biotic Communities, including native, Threatened, Endangered and Special Status Species Standard. There are no public land Riparian areas on this allotment, therefore this standard was not addressed.

/s/ Jerry Dutchover .	07/20/2012
Assistant Field Manager	Date

Standards of Public Land Health
Evaluation of 64009 - EAST CHINA DRAW Allotment
[03/22/2012]

The Roswell Field Office conducted rangeland health assessments at 3 study sites within 64009 - EAST CHINA DRAW. The assessments looked at the Soil/Site Stability, Hydrologic Function and Biotic Integrity indicators within the vicinity of each study site. Existing monitoring data was incorporated into and in support of the field assessment. The summary of each assessment is attached and shown in the following table.

Study Area or Assessment Area	UPLAND			BIOTIC			RIPARIAN		
	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet
64009-N McKNIGHT #1-E193	X			X			N/A		
64009-N McKNIGHT #2-E194	X			X			N/A		
64009-SOUTH McKNIGHT-E192	X			X			N/A		

Twenty-two (22) indicators for Rangeland Health were evaluated for public land on the East China Draw, allotment 64009. Ten of these assessed soil site stability, 11 hydrologic functions and 13 for biotic integrity. These qualitative assessments in conjunction with quantitative information gathered from previous data collected on 5 trend plot locations within this allotment were utilized to make rangeland health determinations. Quantitative evaluations are performed by the Roswell Field Office, which include some or all of the following: ground and vegetative cover and composition, production, frequency and ecological condition. These collections were initiated in the late 1970's/early 1980's are scheduled and conducted approximately every 5 to 10 years.

This allotment contains 3,168 acres of public land scattered among 4,160 acres of private and state leased lands. The studies are located on a Limestone Hills SD-3 ecological site, a Bottomland SD-3 site and a Very Shallow CP-4 ecological site. This is an “M” (Maintain) category allotment.

Recommendations:

At each location the team noted the presence of invasive species, usually yucca, creosote, mesquite or catclaw. The level of invasion was enough to rate the areas as a Moderate departure

from each of the ecological site description, but not enough to warrant mapping for a vegetation treatment, either by herbicide or prescribed burn.

As the majority of the indicators fall in the ‘None to Slight’ or ‘Slight to Moderate’ category, at each of the five study locations, this allotment is rated overall as “Meeting” the standard for Rangeland Health. Continue the rangeland monitoring studies to insure proper stocking rates are maintained and that the perennial grasscover and good plant composition remains.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 64009-N McKNIGHT #1-E193			
Legal Land Desc	SWNW 1 0070S 0220E Meridian 23	Acreage	1705
Ecosite	070DY158NM VERY SHALLOW CP-4	Photo Taken	Y
Watershed	13060005040 FIFTEEN MILE		
Observers	ARNOLD/ORTEGA/PETERSON	Observation Date	03/22/2012
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	EaC	Soil Taxon Name	ECTOR
Texture Class	NM644 CBV-L	Soil Phase	ECTOR
Texture Modifier	NM644 VERY COBBLY LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	7	NOAA Growing Season Precipitation	5.42
NOAA Avg Annual Precipitation	9.16	NOAA Avg Growing Season Precipitation	7.38
Disturbances and Animal Use:			

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground				X	
Comments:						
S H	Gullies				X	
Comments:						

S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement				X	
Comments:						
S H B	Soil Surface Resistance to Erosion				X	
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:						
S H B	Compaction Layer				X	
Comments:						
B	Functional/Structural Groups			X		
Comments:						
B	Plant Mortality/Decadence				X	
Comments:						
H B	Litter Amount				X	
Comments:						
B	Annual Production				X	
Comments:						
B	Invasive Plants			X		
Comments:						
B	Reproductive Capability of Perennial Plants				X	
Comments:						
S	Physical/Chemical/Biological Crusts				X	
Comments:						
B	Wildlife Habitat					X
Comments:						
B	Wildlife Populations					
Comments:	None noted					

B	Special Status Species Habitat					
Comments:	NA					
B	Special Status Species Populations					
Comments:	NA					

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	8	2
H	Hydrologic	0	0	0	10	1
B	Biotic	0	0	2	7	1

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	0	11
Biotic		0	2	8

Site Notes:

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 64009-N McKNIGHT #2-E194			
Legal Land Desc	NWNW 5 0070S 0230E Meridian 23	Acreage	259
Ecosite	042CY017NM BOTTOMLAND SD-3	Photo Taken	Y
Watershed	13060005040 FIFTEEN MILE		
Observers	ARNOLD/ORTEGA/PETERSON	Observation Date	03/22/2012
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	EbC	Soil Taxon Name	ECTOR
Texture Class	NM644 CBV-L	Soil Phase	ECTOR
Texture Modifier	NM644 VERY COBBLY LOAM,D		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	7	NOAA Growing Season Precipitation	5.42
NOAA Avg Annual Precipitation	9.16	NOAA Avg Growing Season Precipitation	7.38
Disturbances and Animal Use:			

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S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground				X	
Comments:						
S H	Gullies				X	

Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement				X	
Comments:						
S H B	Soil Surface Resistance to Erosion				X	
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:						
S H B	Compaction Layer				X	
Comments:						
B	Functional/Structural Groups			X		
Comments:						
B	Plant Mortality/Decadence				X	
Comments:						
H B	Litter Amount				X	
Comments:						
B	Annual Production				X	
Comments:						
B	Invasive Plants			X		
Comments:						
B	Reproductive Capability of Perennial Plants				X	
Comments:						
S	Physical/Chemical/Biological Crusts				X	
Comments:						
B	Wildlife Habitat					X
Comments:						
B	Wildlife Populations					

Comments:	None noted					
B	Special Status Species Habitat					
Comments:	NA					
B	Special Status Species Populations					
Comments:	NA					

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Biotic		0	2	8

Site Notes:

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SITE 64009-SOUTH McKNIGHT-E192			
Legal Land Desc	NENW 17 0070S 0230E Meridian 23	Acreage	1204
Ecosite	042CY020NM LIMESTONE HILLS SD	Photo Taken	Y
Watershed	13060005080 MACHO		
Observers	ARNOLD/ORTEGA/PETERSON	Observation Date	03/22/2012
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	ESD	Soil Taxon Name	ECTOR
Texture Class	NM644 CBX-L	Soil Phase	ECTOR-ROC
Texture Modifier	NM644 EXTREMELY COBBLY L		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
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S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground				X	
Comments:						
S H	Gullies				X	

Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement				X	
Comments:						
S H B	Soil Surface Resistance to Erosion				X	
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:						
S H B	Compaction Layer				X	
Comments:						
B	Functional/Structural Groups			X		
Comments:						
B	Plant Mortality/Decadence				X	
Comments:						
H B	Litter Amount				X	
Comments:						
B	Annual Production				X	
Comments:						
B	Invasive Plants				X	
Comments:						
B	Reproductive Capability of Perennial Plants				X	
Comments:						
S	Physical/Chemical/Biological Crusts				X	
Comments:						
B	Wildlife Habitat					X
Comments:						
B	Wildlife Populations					

Comments:	None noted					
B	Special Status Species Habitat					
Comments:	NA					
B	Special Status Species Populations					
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H	Hydrologic	0	0	0	10	1
B	Biotic	0	0	1	8	1

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

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Soil		0	0	10
Hydrologic		0	0	11
Biotic		0	1	9

Site Notes: